



PATENT

Case Docket No. UCLA019.001A

Date: August 31, 2004

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s) : Tontono et al.
Appl. No. : 10/755,720
Filed : January 12, 2004
For : RECIPROCAL REGULATION
OF INFLAMMATION AND
LIPID METABOLISM BY
LIVER X RECEPTORS
Examiner : Unknown
Group Art Unit : 1614

I hereby certify that this correspondence and all marked attachments are being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop: Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on

August 31, 2004

(Date)

Marina L. Gordey, Reg. No. 52,950

TRANSMITTAL LETTER

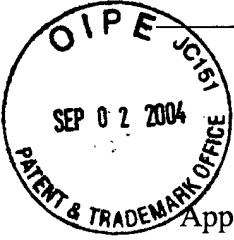
Mail Stop: Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Enclosed for filing in the above-identified application are:

- (X) An Information Disclosure Statement.
- (X) A PTO Form 1449 with forty-one (41) references.
- (X) An Establishment of Right of Assignee to Take Action and Revocation and Power of Attorney with a copy of an Assignment.
- (X) The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment, to Account No. 11-1410.
- (X) Return prepaid postcard.

Marina L. Gordey
Registration No. 52,950
Agent of Record
Customer No. 20,995
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**INFORMATION DISCLOSURE STATEMENT**

Applicant : Tontonoz et al.
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Examiner : Unknown
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Alexandria, VA 22313-1450

Dear Sir:

Enclosed is form PTO-1449 listing 41 references that are also enclosed.

This Information Disclosure Statement is being filed before the receipt of a first Office Action on the merits, and presumably no fee is required in accordance with 37 C.F.R. § 1.97(b)(3). If a first Office Action on the merits was mailed before the mailing date of this Statement, the Commissioner is authorized to charge the fee set forth in 37 C.F.R. § 1.17(p) to Deposit Account No. 11-1410.

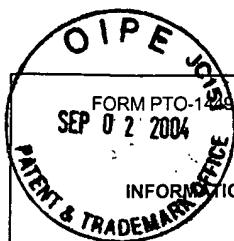
Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: August 31, 2004

By: 

Marina L. Gondey
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Agent of Record
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FORM PTO-1485
SEP 02 2004U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.
UCLA019.001AAPPLICATION NO.
10/755,720INFORMATION DISCLOSURE STATEMENT
BY APPLICANT

(USE SEVERAL SHEETS IF NECESSARY)

APPLICANT
Tontoz et al.FILING DATE
January 12, 2004GROUP
1614

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO

EXAMINER
INITIAL

OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)

	1	Callejas, N.A. et al. (2000) "Regulation of cyclooxygenase 2 expression in Hepatocytes by CCAAT/enhancer-binding proteins," <i>Gastroenterology</i> 119:493-501.
	2	Castrillo, A. et al. (2000) "Inhibition of I κ B kinase and I κ B phosphorylation by 15-deoxy- $\Delta^{12,14}$ -prostaglandin J ₂ in activated murine macrophages," <i>Mol. and Cell Biol.</i> 20:1692-1698.
	3	Castrillo, A. et al. (2001) "Inhibition of the nuclear factor κ B (NF- κ B) pathway by tetracyclic kaurene diterpenes in macrophages," <i>J. Bio. Chem.</i> 276:15854-15860.
	4	Chawla, A. et al. (2001) "A PPAR γ -LXR-ABCA1 pathway in macrophages is involved in cholesterol efflux and atherogenesis," <i>Mol. Cell</i> 7:161-171.
	5	Chawla, A. et al. (2001) "PPAR- γ dependent and independent effects on macrophage-gene expression in lipid metabolism and inflammation," <i>Nat. Med.</i> 7:48-52.
	6	Chen, L.M. et al. (1996) " <i>Salmonella</i> ssp. are cytotoxic for cultured macrophages," <i>Mol. Microb.</i> 21:1101-1115.
	7	Detmers, P.A. et al. (2000) "Deficiency in inducible nitric oxide synthase results in reduced atherosclerosis in apolipoprotein E-deficient mice," <i>J. Immunol.</i> 165:3430-3435.
	8	Febbraio, M. et al. (2000) "Targeted disruption of the class B scavenger receptor CD36 protects against atherosclerotic lesion development in mice," <i>J. Clin. Invest.</i> 105: 1049-1056.
	9	Fu, X. et al. (2001) "27-hydroxycholesterol is an endogenous ligand for liver X receptor in cholesterol-loaded cells," <i>J. Biol. Chem.</i> 276:38378-38387.
	10	Galis, Z.S. et al. (1995) "Macrophage foam cells from experimental atheroma constitutively produce matrix-degrading proteinases," <i>PNAS USA</i> 92:402-406.
	11	Galis, Z.S. et al. (2002) "Targeted disruption of the matrix metalloproteinase-9 gene impairs smooth muscle cell migration and geometrical arterial remodeling," <i>Circ. Res.</i> 91:852-859.
	12	Glass, C.K. et al. (2001) "Atherosclerosis: the road ahead," <i>Cell</i> 104:503-516.

EXAMINER

DATE CONSIDERED

*EXAMINER: INITIAL IF CITATION CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED, INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT (USE SEVERAL SHEETS IF NECESSARY)	ATTY. DOCKET NO. UCLA019.001A	APPLICATION NO. 10/755,720
	APPLICANT Tontonoz et al.	
	FILING DATE January 12, 2004	GROUP 1614

EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)
13	Gu, L. et al. (1998) "Absence of monocyte chemoattractant protein-1 reduces atherosclerosis in low density lipoprotein receptor-deficient mice," <i>Mol. Cell</i> 2:275-281.
14	Hansson, G.K. (1999) "Inflammation and immune response in atherosclerosis," <i>Curr. Atheroscler. Rep.</i> 1:150-155.
15	Herrlich, P. (2001) "Cross-talk between glucocorticoid receptor and AP-1," <i>Oncogene</i> 20:2465-2475.
16	Jiang, C. et al. (1998) "PPAR-γ agonists inhibit production of monocyte inflammatory cytokines," <i>Nature</i> 391:82-86.
17	Joseph, S.B. et al. (2002) "Direct and indirect mechanisms for regulation of fatty acid synthase gene expression by liver X receptors," <i>J. Biol. Chem.</i> 277:11019-11025.
18	Joseph, S.B. et al. (2002) "Synthetic LXR ligand inhibits the development of atherosclerosis in mice," <i>PNAS USA</i> 99:7604-7609.
19	Joseph, S.B. et al. (2003) "Reciprocal regulation of inflammation and lipid metabolism by liver X receptors," <i>Nature Med.</i> 9:213-219.
20	Karin, M. et al. (2001) "AP-1-glucocorticoid receptor crosstalk taken to a higher level," <i>J. Endocrinol.</i> 169:447-451.
21	Kuhlencordt, P.J. (2001) "Genetic deficiency of inducible nitric oxide synthase reduces atherosclerosis and lowers plasma lipid peroxides in apolipoprotein E-knockout mice," <i>Circulation</i> 103:3099-3104.
22	Lafitte, B.A. et al. (2001) "Autoregulation of the human liver X receptor α promoter," <i>Mol. Cell. Biol.</i> 21:7558-7568.
23	Lafitte, B.A. et al. (2002) "Orphan Nuclear Receptors find a home in the arterial wall," <i>Curr. Atheroscl. Rep.</i> 4:213-221.
24	Li M. et al. (2000) "Peroxisome proliferator-activated receptor γ-dependent repression of the inducible nitric oxide synthase gene," <i>Mol. & Cell. Bio.</i> 20:4699-4707.
25	Liu, S-X. et al. (1998) "Oxidized cholesterol in oxidized low density lipoprotein may be responsible for the inhibition of LPS-induced nitric oxide production in macrophages," <i>Atherosclerosis</i> 136:43-49.
26	Lowenstein, C.J. (1993) "Macrophage nitric oxide synthase gene: two upstream regions mediate induction by interferon γ and lipopolysaccharide," <i>PNAS USA</i> 90:9730-9734.
27	Lusis, A.J. (2000) "Atherosclerosis," <i>Nature</i> 407:233-241.
28	Mestre, J.R. et al. (2001) "Redundancy in the signaling pathways and promoter elements regulating cyclooxygenase-2 gene expression in endotoxin-treated macrophage/monocytic cells," <i>J. Biol. Chem.</i> 276:3977-3982.
29	Moore, K.J. et al. (2001) "The role of PPAR-γ in macrophage differentiation and cholesterol uptake," <i>Nat. Med.</i> 7:41-47.
30	Nagy, L. et al. (1998) "Oxidized LDL regulates macrophage gene expression through ligand activation of PPARγ," <i>Cell</i> 93:229-240.
31	Nissen, R.M. et al. (2000) "The glucocorticoid receptor inhibits NFκB by interfering with serine-2 phosphorylation of the RNA polymerase II carboxy-terminal domain," <i>Gen. & Dev.</i> 14:2314-2329.
32	Pasterkamp, G. et al. (2000) "Atherosclerotic arterial remodeling and the localization of macrophages and matrix metalloproteases 1, 2 and 9 in the human coronary artery," <i>Atherosclerosis</i> 150:245-253.
33	Repa, J.J. et al. (2000) "The role of orphan nuclear receptors in the regulation of cholesterol homeostasis," <i>Annu. Rev. Cell Dev. Bio.</i> 16:459-481.
34	Repa, J.J. et al. (2002) "The liver X receptor gene team: potential new players in atherosclerosis," <i>Nat. Med.</i> 8:1243-1248.
35	Ricote, M. et al. (1998) "The peroxisome proliferator-activated receptor-γ is a negative regulator of macrophage activation," <i>Nature</i> 391:79-81.

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	36	Sheu, M.Y. et al. (2002) "Topical peroxisome proliferator activated receptor- α activators reduce inflammation in irritant and allergic contact dermatitis models," <i>J. Invest. Dermatol.</i> 118 :94-101.
	37	Straus, D.S. et al. (2000) "15-Deoxy- $\Delta^{12,14}$ -prostaglandin J ₂ inhibits multiple steps in the NF-kB signaling pathway." <i>PNAS USA</i> 97 :4844-4849.
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	39	Tangirala, R.K. et al. (2002) "Identification of macrophage liver X receptors as inhibitors in atherosclerosis." <i>PNAS USA</i> 99 :11896-11901.
	40	Tontonoz, P. et al. (1998) "PPAR γ promotes Monocyte/Macrophage differentiation and uptake of oxidized LDL." <i>Cell</i> 93 :241-252.
	41	Wu, Z.L. et al. (1997) Oxidized low-density lipoprotein decreases the induced nitric oxide synthesis in rat mesangial cells." <i>Cell Bio. & Function</i> 16 :153-158.

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